

HOV Pooled Fund Study

HOV Lane Safety Considerations Handbook

Final Project Fact Sheet

Project Scope

This project developed the *HOV Safety Considerations Handbook* and supporting outreach materials. The handbook identifies safety considerations and best practices for HOV facilities, and provides a technical document that focuses ways to improve safety and performance of HOV facilities and further the state of the practice of safe HOV system design and operation.

The handbook serves as a comprehensive, easy-to-use reference guide for HOV-lane safety considerations. Its purpose is to provide a better understanding of HOV safety needs and improved consistency in practices that enhance HOV safety. Through a review of current guidance and operator experiences, the handbook's objective is to disseminate information on recommended safety practices associated with HOV facility planning, design, and operations. Safety issues concerning high occupancy toll (HOT) facilities are also addressed in the handbook.

The goal of the HOV Pooled-Fund Study (HOV PFS) is to assemble regional, state, and local agencies, and the Federal Highway Administration (FHWA) to

- identify issues that are common among agencies;
- suggest projects and initiatives;
- select and initiate projects intended to address identified issues;
- disseminate results; and
- assist in solution deployment.

Participating state transportation agencies include California, Georgia, Maryland, Massachusetts, New Jersey, New York, Tennessee, Virginia, and Washington.

Handbook Overview

HOV facilities are usually found in heavily congested corridors where the physical and financial feasibility of expanding the roadway is limited. The question of safety in HOV lanes is especially salient when considering the differences among agencies in design and operational features of HOV lanes, which can influence safety conditions.

While a significant number of HOV lanes are in operation, very little quantitative analysis or comparison of results has been performed to help the designer or operator evaluate the safety considerations and implement the best possible facility design treatment and operation policy for a specific setting. The handbook offers the most comprehensive resource to date on available information related to HOV facility safety.



At-grade Access to Single-lane Reversible HOV Facility in Houston, Texas

The *HOV Safety Considerations Handbook* contains the following chapters:

- Chapter One – Introduction
- Chapter Two – Overview of HOV Facilities and Safety Considerations
- Chapter Three – Safety Considerations in HOV Facility Planning
- Chapter Four – Safety Considerations in HOV Facility Design
- Chapter Five – Safety Considerations in HOV Facility Operations
- Chapter Six – Safety Considerations in the Development of HOT Facilities
- Chapter Seven – Future Research

The handbook also includes a glossary of terms and list of references and additional resources.

Project Products

The *HOV Safety Considerations Handbook* and outreach materials were developed by the Texas Transportation Institute (TTI), a part of the Texas A&M University System. Battelle acted as the prime contractor for the project. The following products are available from the project:



**Buffer-separated Concurrent Flow Access
in Southern California**

Handbook – Comprehensive guide to safety considerations in HOV and HOT facility planning, design and operation

Brochure – Promotes the availability of the handbook

Frequently Asked Questions – Answers common questions about HOV safety

Project PowerPoint – Summarizes the project objectives and components.

Subject PowerPoint – Describes HOV safety and considerations for development and operation of safe facilities

Project Website: http://hovpfs.ops.fhwa.dot.gov/cfprojects/new_detail.cfm?id=52&new=0

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Administration**